



1/3

GAATTCCGGGTGGGTAGGTCGGGCAGGGTAGGACAGGCCTAAGAGAGAGGGCCGGACAGACCTCC  
TTTGGAAGCAGCCACTTCTGGTCCCCATCCCTGGAGCGATCGAGCGCAGGATCTGCTGTCCCAT  
GGGACAGCAGATCTCTCTTCCCAGTGCACAGCTTCTCCTCTGCCTGTTTTCCCTGCTTCCAGTG  
CTCCAGGTGGCCCAACCAGGGCCAGGCACCCCAGGACCAGCCCCTGTGGACACTTTTGGAGCAGT  
ACTGCCACAGGACCACAATTGGGAATTTTTTCAGGTCCCTACACCTACTGCAACACGACCTTGGA  
CCAGATCGGGACCTGCTGGCCACAGAGCGCACCCGGAGCCCTAGTAGAGAGACCGTGCCCCGAG  
TACTTCAATGGCATCAAGTACAACACGACCCGGAATGCCTACAGAGAGTGCCTGGAGAACGGGA  
CCTGGGCCTCAAGGGTCAACTACTCACACTGCGAACCCTTTTGGATGACAAGCAGAGAAAGTA  
TGACCTGCATTACCGAATCGCCCTCATTGTCAACTACCTGGGTCACTGTGTTTCCGTGGTGGCC  
CTGGTGGCCGCTTTCCTGCTTTTCCTAGTGCTGCGGAGTATCCGCTGCCTGAGGAATGTGATCC  
ACTGGAACCTCATCACCACCTTCATTCTGAGAAACATCGCGTGGTTCCTGCTGCAACTCATCGA  
CCACGAAGTGCACGAGGGCAATGAGGTCTGGTGCCGCTGCATCACCACCCTTCAACTATTTT  
GTGGTCAACCACTTCTTCTGGATGTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTGATGA  
CGTACTCCACAGAGCACCTGCGCAAGTGGCTTTTCCTCTTCATTGGATGGTGCATTCCCTGCCC  
TATCATCATCGCCTGGGCAGTTGGCAAACCTCTACTATGAGAATGAGCAGTGCTGGTTTGGCAAG  
GAAGCTGGTGATTTGGTGGACTACATCTACCAGGGCCCCGTCATGCTTGTGCTGTTGATCAATT  
TTGTATTTCTGTTTAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATCCACCACGTCCGA  
GACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTCCTCCTCCCCCTGTTGGGCATCACC  
TACATGCTCTTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCAGATTGTGTTTCATCTACTTCA  
ACTCTTTTCTGTCAGTCCTTCCAGGGTTTCTTTGTGTCCGTTTTCTACTGCTTCTTCAATGGAGA  
GGTGCGCGCGGCCCTGAGAAAGCGGTGGCACTCGGGGCAGGACCACCACGCCCTCCGGGTGCCT  
GTGCGCCGGGCCATGTCCATCCCTACGTGCGCCACCAGGATCAGCTTCCACAGCATCAAGCAGA  
CAGCTGCTGTGTGACCCTCTGTCAACCGTCTGCCCCGAGTCCACCCTGAGGCAGCTTCTCCAT  
CCTTTACAGCCTTCCCCTGGGTCTCCTTGCTACCCCTGACCCACAGGTACAAGGTACAGGAGAA  
GGGAGGAGAACGAACACTCCC (SEQ ID NO:1)

FIGURE 1

underlined = deleted in targeting construct

[ ] = sequence flanking Neo insert in targeting construct

GAATTCGGGGTGGGTAGGTCTGGGCAGGGTAGGACAGGCCTAAGAGAGAGGCCGGACAGAC  
 CTCCTTTGGAAGCAGCCACTTCTGGTCCCCATCCCTGGAGCGATCGAGCGCAGGATCTGC  
 TGTCCCATGGGACAGCAGATCTCTCTTCCCAGTGCACAGCTTCTCCTCTGCCTGTTTTCC  
 CTGCTTCCAGTGCTCCAGGTGGCCCAACCAGGCCAGGCACCCAGGACCAGCCCCCTGTGG  
 ACACTTTTGGAGCAGTACTGCCACAGGACCACAATTGGGAATTTTTCAGGTCCCCTACACC  
 TACTGCAACACGACCTTGGACCAGATCGGGACCTGCTGGCCACAGAGCGCACCCGGAGCC  
 CTAGTAGAGAGACCGTGCCCCGAGTACTTCAATGGCATCAAGTACAACACGACCC [GGAA  
 TGCCTACAGAGAGTGCCCTGGA] GAACGGGACCTGGGCCTCAAGGGTCAACTACTC  
CACT  
GCGAACCCATTTTGGATGACAAGCAGAGAAAGTATGACCTGCATTACCGAATCGCCCTCA  
TTGTCAACTACCTGGGTCACTGTGTTTCCGTGGTGGCCCTGGTG [GCCGCTTTCCTGCTT  
 TTCCTAGTGCTGCG] GAGTATCCGCTGCCTGAGGAATGTGATCCACTGGAACCTCATCAC  
 CACCTTCATTCTGAGAAACATCGCGTGCTTCCCTGCTGCAACTCATCGACCACGAAGTGCA  
 CGAGGGCAATGAGGTCTGGTGCCGCTGCATCACCACCATCTTCAACTATTTTGTGGTCAC  
 CAACCTTCTTCTGGATGTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTGATGACGTA  
 CTCCACAGAGCACCTGCGCAAGTGCGCTTTTCTCTTCATTGGATGGTGCATTCCTTGCCC  
 TATCATCATCGCCTGGGCAGTTGGCAAACCTCTACTATGAGAATGAGCAGTGCTGGTTTGG  
 CAAGGAAGCTGGTGATTGTTGGTGGACTACATCTACCAGGGCCCCGTGCTGCTTGTGCTGTT  
 GATCAATTTTGTATTTCTGTTTAAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATC  
 CACCACGTCCGAGACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTCCCTCCTCCC  
 CCTGTTGGGCATCACCTACATGCTCTTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCA  
 GATTGTGTTTCATCTACTTCAACTCTTTCCTGCAGTCCTTCCAGGGTTTCTTTGTGTCCGT  
 TTTCTACTGCTTCTTCAATGGAGAGGTGCGCGCGGCCCTGAGAAAGCGGTGGCACTCGGG  
 GCAGGACCACCACGCCCTCCGGGTGCCGTGTGCGCCGGGCCATGTCCATCCCTACGTCGCC  
 CACCAGGATCAGCTTCCACAGCATCAAGCAGACAGCTGCTGTGTGACCCTCTGTACCGT  
 CTGCCCCGAGTCCACCACTGAGGCAGCTTCTCCATCCTTTACAGCCTTCCCCTGGGTCC  
 TCCTTGCTACCCTGACCCACAGGTACAAGGTACAGGAGAAGGGAGGAGAACGAACACTCC  
 C

FIGURE 2A

## Gene Sequence Structure

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441 bp

Sequence Deleted

582 bp

Size of full-length  
cDNA: 1557 bp

## Targeting Vector\* (genomic sequence)

Construct Number: 3050

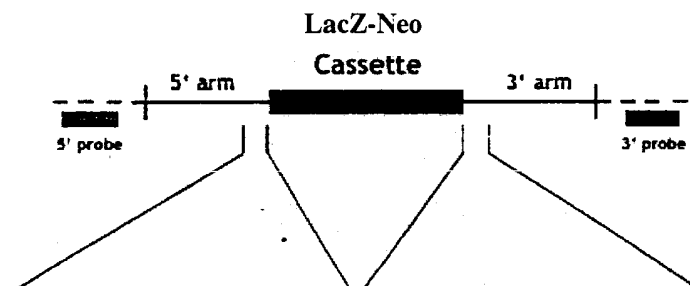
Arm Length:

5': 3.1 kb

3': 2.5 kb

————— Targeting Vector  
- - - - - Endogenous Locus

\* Not drawn to scale



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5'>AGCCCTATGTGTAATTTTCAT
ATAAATGACTCATATTAGCTTTCA
GATATGCATTGTGTTTTCAGGTCT
GGGAGAACTAAGGAGTGTGGACCT
TATCCTGCAGGTACTAGGGAGCCA
GGGAGGGCTTTTGAGGCGGGAGGG
CGTCCTGACTCTCAGTGGTTGGCA
TCTTCTCTAGGGAATGCCTACAGA
GAGTGCCTGGA<3'
(SEQ ID NO:2)
  
```

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5'>GCCGCTTTCCTGCTTTTCCTA
GTGCTGCGGTGAGTCCACCTCCAC
CCTGCTTCCTCCTTGCTTTGCCT
CTCCAGACATTGTCTCTTCCATT
CTGGGGCCCCGGGAACAGTAGCCA
GAAGTGGGTTTAAGTCAGACCCCC
AGGGCCATGACCACCAGCCTGCCT
GAAGGTTAGAGAGCAAGCCCAGCT
GGGACCACCAG<3'
(SEQ ID NO:3)
  
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FIGURE 2B